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ABSTRACT

This publication contains 16 subjects appropriate for use in a competency list for the occupation of microcomputer applications specialist, 1 of 12 occupations within the business/computer technologies cluster. Each unit consists of a number of competencies; a list of competency builders is provided for each competency. Titles of the 16 units are as follows: employability skills; professionalism; teamwork; professional and ethical standards; economic and business principles; customer relations; problem analysis; project management; technical documentation; basic personal computer (PC) concepts; packaged PC applications; general office functions; office technology; general accounting functions; application programming and design; and supervision. (YLB)

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TECH PREP

"GET SERIOUS . . . ABOUT SUCCESS"

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Microcomputer Applications Specialist

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Microcomputer Applications Specialist

NOTE: Each TCP should respond to labor market demands in your area. Therefore, the following pages should be examined before being selected for use in TCP Part I (See "The TCP Process" Tab). For example, some units may not apply to your situation, nor might all the competencies within each unit be appropriate. Also, note that several units appear within each of the twelve occupations in this binder. Those "common" units should only appear once in the draft competency list for TCP Part I if you are compiling several occupations in a cluster format (See "TCP Matrix" Tab).

Units to Consider:	Page
Employability Skills	MA-3
Professionalism	MA-8
Teamwork	MA-12
Professional and Ethical Standards	MA-14
Economic and Business Principles	MA-16
Customer Relations	MA-20
Problem Analysis	MA-21
Project Management	MA-22
Technical Documentation	MA-23
Basic Personal Computer Concepts	MA-24
Packaged PC Applications	MA-26
General Office Functions	MA-31
Office Technology	MA-37
General Accounting Functions	MA-40
Application Programming and Design	MA-45
Supervision	MA-50

DON'T FORGET TO INSERT YOUR ACADEMIC COMPETENCIES HERE

Communications Literacy, Mathematics Literacy, Science Literacy, and Technology Literacy have been removed so that you may insert your own academic lists here.

COMMUNICATIONS LITERACY

(e.g., Reading, Writing, Speaking, and Listening)

MATHEMATICS LITERACY

(e.g., Algebra, Geometry, Trigonometry, Calculus)

SCIENCE LITERACY

(e.g., Physical Science, Environmental Science, Agriscience, Biology, Chemistry, Physics, Anatomy & Physiology)

TECHNOLOGY LITERACY

(i.e., the impact of technology on humans and their home, work, and play environments)

Unit: Employability Skills

Competency: Develop a career plan

Competency Builders:

Identify current interests and aptitudes
Identify common barriers to employment
Describe strategies to overcome employment barriers
Locate resources for finding employment
Research job trends
Identify career options
Identify advantages and disadvantages of career options (in addition to other than monetary)
Identify job requirements
Investigate education/training opportunities
Evaluate personal strengths and weaknesses

Competency: Prepare for employment

Competency Builders:

Identify traditional and non-traditional employment sources
Identify present and future employment opportunities (by geographic location)
Research job opportunities, including non-traditional careers
Compare salary ranges and benefit packages
Compile occupational profile
Identify rights and responsibilities of equal employment opportunity laws
Design resume and cover letter
Target resume
Secure references
Investigate generic and specific employment tests (e.g., civil service exam; drug screening)
Use follow-up techniques to enhance employment potential
Demonstrate legible written communication skills using correct grammar, spelling, punctuation, and concise wording
Describe methods for handling illegal questions on job application forms and during interviews
Write letter of application
Research prospective employer and services performed
Explain critical importance of personal appearance, hygiene, and demeanor
Interpret job description
Demonstrate appropriate interview question and answer techniques
Demonstrate methods for handling difficult interview questions
Evaluate job offers
Write letter of acceptance
Write letter of declination
Demonstrate good listening skills
Ask for the job tactfully
Participate in extracurricular activities (e.g., student government, community projects,)

Competency: Evaluate the importance of self-esteem as an employability skill

Competency Builders:

Identify factors that affect self-esteem
Compare effects of low self-esteem and high self-esteem
Identify strategies to promote positive self-esteem

Competency: Demonstrate job retention skills

Competency Builders:

Identify employer expectations regarding job performance, work habits, attitudes, personal appearance, and hygiene
Exhibit appropriate work habits and attitude
Demonstrate ability to set priorities
Identify behaviors to establish successful working relationships
Identify alternatives for dealing with harassment, bias, and discrimination based on race, color, national origin, sex, religion, handicap, or age
Identify opportunities for advancement
List reasons for termination
List consequences of being absent frequently from job
List consequences of frequently arriving late for work
Demonstrate interpersonal relations skills (i.e., verbal and written)
Demonstrate negotiation skills
Demonstrate teamwork
Follow chain-of-command
Exhibit appropriate job dedication

Competency: Demonstrate knowledge of work ethic

Competency Builders:

Define work ethic
Identify factors that influence work ethic
Differentiate law and ethics
Describe how personal values are reflected in work ethic
Describe how interactions in the workplace affect personal work ethic
Describe how life changes affect personal work ethic

Competency: Exhibit appropriate work ethic

Competency Builders:

Use time-management techniques
Avoid personal activity during work hours
Attend work as scheduled
Adhere to company and/or governmental policies, procedures, rules, and regulations
Exercise confidentiality
Demonstrate appropriate human relations skills
Adhere to rules of conduct
Accept constructive criticism
Offer constructive criticism
Take pride in work
Resolve conflict
Manage stress
Avoid sexual connotations and harassment
Adjust to changes in the workplace
Demonstrate punctuality
Assume responsibility for personal decisions and actions
Take responsibility for assignments
Follow chain-of-command

Competency: Apply decision-making techniques

Competency Builders:

Identify decision to be made
Identify ownership of decision to be made
Identify possible alternatives and their consequences
Make decisions based on facts, legality, ethics, goals, and/or culture
Apply time factor(s)
Present decision to be implemented
Evaluate decision made
Take responsibility for decision

Competency: Apply problem-solving techniques

Competency Builders:

Identify problem
Select appropriate problem solving tools/techniques
Identify root problem cause(s)
Track root problem cause(s)
Identify possible solutions and their consequences (e.g., long term, short term, crisis)
Use resources to explore possible solutions to problem
Contrast advantages and disadvantages of each solution
Identify appropriate action
Evaluate results
Identify post-preventive action

Competency: Exhibit characteristics for job advancement

Competency Builders:

Display positive attitude
Demonstrate knowledge of position
Perform quality work
Adapt to changing situations and technology
Demonstrate capability/responsibility for different positions
Identify characteristics of effective leaders
Identify opportunities for leadership in work place/community
Demonstrate initiative to affect change in workplace
Participate in continuing education/training program
Responds appropriately to criticism from employer, supervisor, or other employees
Exhibit awareness of corporate culture
Prepare for job setbacks
Exhibit continual growth based on performance evaluation
Set realistic goals

Unit: Professionalism

Competency: Project professional image

Competency Builders:

Define professionalism
Exhibit professional appearance
Exhibit professional manners
Project professional attitude
Identify individuals' vital role in organization
Exhibit proper etiquette in professionally-related situations

Competency: Achieve individual and professional goals

Competency Builders:

Set flexible, realistic, and measurable goals
Identify potential barriers to achieving goals
Identify strategies for addressing barriers to goal achievement
Breakdown long-term goals into short-term goals
Prioritize goals
Commit to goals
Adjust goals
Obtain support for goals
Reward goal achievement

Competency: Manage personal finances

Competency Builders:

Explain need for personal management records
Balance checkbook
Identify tax obligations
Analyze how credit affects financial security
Compare types and methods of investments
Compare types and methods of borrowing
Compare types and methods of insurance
Compare types of retirement options/plans
Identify discriminatory vs. non-discriminatory expenditures

Competency: Support community well-being

Competency Builders:

Identify environmental, educational, and social issues
Participate in social and/or community activities

Competency: Achieve organizational goals

Competency Builders:

Evaluate personal goals in relation to organizational goals
Monitor progress by evaluating feedback
List responsibilities in relation to organization goals
Accomplish assigned tasks
Exercise responsibility in relation to organizational goals
Set appropriate personal performance standards
Communicate goals with supervisor and peers
Demonstrate knowledge of products and services
Promote organizational image and mission

Competency: Demonstrate positive relations in the workplace

Competency Builders:

Identify personality types of self and other
Identify various management styles
Support employer expectations
Support employer decisions
Accept constructive criticism
Give constructive feedback
Adapt to changes in workplace
List factors to consider before resigning
Write letter of resignation

Competency: Manage stressful situations

Competency Builders:

Accept stress as part of daily life
Identify personal and professional factors contributing to stress
Describe physical and emotional responses to stress
Evaluate positive and negative effects of stress on productivity
Identify strategies for reducing stress
Implement strategies to manage stress
Create strategies for developing and maintaining support systems

Competency: Analyze effects of family on work and work on family

Competency Builders:

Identify how family values, goals, and priorities are reflected in work place
Identify responsibilities and rewards associated with paid and non-paid work
Identify responsibilities and rewards associated with families
Explain how family responsibilities can conflict with work
Explain how work can conflict with family responsibilities
Explain how work-related stress can affect families
Explain how family-related stress can affect work
Identify family support systems and resources
Identify work-related support systems and resources
Communicate with family regarding work

Competency: Apply lifelong learning skills

Competency Builders:

Define lifelong learning
Identify factors that cause need for lifelong learning
Analyze effects of change
Identify reasons why goals change
Describe importance of flexibility and adaptability
Evaluate need for continuing education/training

Competency: Manage professional development

Competency Builders:

Identify career opportunities
Modify career plan
Participate in continuing education/training opportunities
Document continuing education/training
Read profession-related manuals, technical journals, and periodicals
Attend meetings, workshops, seminars, conferences, and demonstrations
Participate in professional organizations
Build personal/professional mentor relationship
Build personal/professional support system
Build professional network
Strengthen communication skills
Strengthen leadership skills
Strengthen management skills

Unit: Teamwork

Competency: Demonstrate knowledge of teamwork

Competency Builders:

Define empowerment
Differentiate work groups and teams
Identify conditions essential to teamwork (e.g., brainstorming)
Explain influence of culture (e.g., corporate, community) on teamwork
Identify appropriate situations for using teams
Define team structures (e.g., cross functional, quality improvement, task force, quality circles)
Identify team building concepts
Describe characteristics and dynamics of teams
Identify characteristics of effective team leaders and members
Identify responsibilities of a valuable team member
Identify methods of involving each member of a team
Explain how individuals from various backgrounds contribute to work-related situations (e.g., technical training, cultural heritage)
Explain the purpose of facilitators
Define consensus
Define reward/recognition system

Competency: Demonstrate teamwork

Competency Builders:

Identify purpose of team and intended goal (include time frames)
Structure team around purpose
Define responsibilities of team members
Contribute to efficiency and success of team
Work toward individual and team milestones
Analyze results of team project
Facilitate a team meeting
Assist team member(s) with problem
Monitor time frame
Stress continuous improvement
Accept failure as part of learning

Competency: Use teamwork to solve problems

Competency Builders:

Identify appropriate situations for using teams
Use problem-solving process in a team setting
Identify quality management processes/techniques
Identify quality assurance processes/techniques
Prepare presentation

Competency: Conduct team meetings

Competency Builders:

Plan agenda
Schedule meeting and location
Invite appropriate personnel
Solicit outside speakers as needed
Assign someone to take minutes
Facilitate introductions
Invite questions and comments and group participation
Focus team on agenda items
Assign appropriate action, time frame and accountability to tasks
Monitor time
Close meeting on time
Publish minutes in timely manner
Set ground rules
Avoid placing individual agendas above the group's agenda

Unit: Professional and Ethical Standards

Competency: Explain professional responsibilities

Competency Builders:

Explain the need for professional and ethical standards
Explain responsibility of the individual to apply ethical standards
Identify responsibility to client(s) or employer(s)
Explain employer's consequences of unprofessional and/or unethical employee behavior
Identify responsibility to self (e.g., professional appearance and limitations) and to profession
Explain importance of conflict resolution in the workplace

Competency: Describe self-managed employees

Competency Builders:

Explain the need for organizing tasks
Explain management-by-objectives
Explain importance of planning, both long-term and short-term
Explain importance of evaluating progress
Explain importance of reporting progress
Explain time management
Explain the benefit of creative brainstorming and innovative thinking

Competency: Describe intellectual property

Competency Builders:

Explain legal ownership of proprietary assets produced by the computing professional
Explain public policy
Explain rights of the originator
Explain rights of the public
Explain patent
Explain copyright
Explain licenses
Explain confidentiality

Competency: Apply professional and ethical standards

Competency Builders:

Identify computing industry's standards
Describe computing industry's code of ethics
Explain various ethics established by computing societies
Apply various ethics established by computing societies

Unit: Economic and Business Principles

Competency: Describe basic economic concepts

Competency Builders:

Identify importance of economic resources
Explain concept of economic resources
Explain importance of economic resources
Explain concept of economic goods and services
Differentiate between economic goods and services
Differentiate between needs and wants
Explain concept of supply and demand
Explain concept of price
Explain how supply, demand, and price are related
Explain concept of private enterprise and business ownership
Explain concept of profit
Explain concept of risk
Explain concept of competition
Explain relationship among risk, competition, and profit

Competency: Conduct training

Competency Builders:

Secure training resources, materials, and equipment
Assess training needs
Train employees
Evaluate progress
Provide appropriate feedback

Competency: Evaluate economic systems

Competency Builders:

Compare types of economic systems
Research free enterprise system
Interpret relationship between government and business
Interpret relationship between labor and management

Competency: Illustrate basic economic principles

Competency Builders:

Illustrate global economic and world market applications
Illustrate economic cycles (e.g., unemployment, recession, inflation, budget deficits)
Illustrate economic activity's affect on business (e.g., financial, competitor indicators, industry)

Competency: Analyze cost and profit influences

Competency Builders:

Identify importance of maximizing quality
Identify importance of maximizing productivity
Contrast specialized training and cross training
Contrast labor and management
Contrast government and business

Competency: Illustrate economic indicators and trends

Competency Builders:

Define gross national product and gross domestic product
Interpret impact of interest rates
Interpret impact of government spending
Interpret impact of seasonal business cycles
Interpret impact of inflation, growth, recession, and unemployment
Interpret impact of national and world events
Interpret impact of the growth of international trade

Competency: Explain basic international trade concepts

Competency Builders:

Explain nature and importance of international trade
Contrast advantages and disadvantages of marketing in international trade
Explain balance of trade concepts
Describe impact of foreign investment

Competency: Explain basic business concepts

Competency Builders:

Identify functions of business
Explain role of management
Explain role of labor
Explain concept of service as a product
Explain role of administration
Explain role of operations
Identify role of company objectives
Identify importance of ethical business practices
Identify types of ownership
Identify components of a business plan

Competency: Summarize business principles

Competency Builders:

Explain business organizations and functions
Describe business reporting and information flow
Map interface of departmental functions
Identify communication channels (e.g., formal, informal)
Explain total quality management (TQM) principles

Competency: Illustrate legal concepts

Competency Builders:

Define legal terminology
Explain business law concepts
Interpret contracts and/or legal documents
Explain relationship of laws and regulations to company contracts, policies, and procedures
Explain laws relating to working conditions, wages and hours, civil rights, social security, disability, and unemployment insurance

Competency: Explain role of marketing

Competency Builders:

Explain aspects of sound business image
Identify purposes of marketing
Identify functions of marketing
Describe effects of marketing
Explain product/service variety
Identify target markets
Define sales potential
Explain pricing strategies
Differentiate advertising campaigns
Explain advantages and disadvantages of advertising agencies
Describe sales incentive programs
Maintain marketing feedback and make appropriate changes
Identify types of marketing strategies and the advantage and disadvantage of each (e.g. phone, mail, person)
Design monitor plan

Competency: Serve customers/clients

Competency Builders:

Identify importance of customer
Identify customer services to provide
Relate to customers in timely fashion
Identify customer needs and wants
Gather complete and accurate information
Apply customer service concepts and terminology
Identify methods for addressing dissatisfied customers

Unit: Customer Relations

Competency: Demonstrate positive relations with customers

Competency Builders:

Identify importance of customers to business
Differentiate between customer needs and wants
Provide prompt and courteous service
Resolve customer inquiries and complaints and/or refer customer to appropriate person
Identify methods of addressing dissatisfied customers

Competency: Perform scheduling functions to meet customers needs

Competency Builders:

Create calendar/schedule
Maintain appointment calendars
Process requests for appointments
Verify appointments
Notify customer of changes in schedule
Manage scheduling conflicts

Unit: Problem Analysis

Competency: Appraise situations

Competency Builders:

Identify concerns
Classify concerns
Set priorities
Identify resolution process
Plan resolution

Competency: Analyze potential problems

Competency Builders:

Identify potential problems
Identify likely causes
Identify preventive actions
Identify contingent actions

Competency: Analyze actual problems

Competency Builders:

Identify deviation
Identify problem and possible causes
Test for probable causes
Verify cause

Competency: Analyze decisions

Competency Builders:

Identify objective(s)
Classify objective(s)
Identify alternatives
Evaluate alternatives
Assess risks
Make final choice

Unit: Project Management

Competency: Explain project management

Competency Builders:

Identify project purpose/goal
Identify project objectives
Identify work breakdown structure (WBS)
Identify resource requirements

Competency: Plan projects

Competency Builders:

Apply responsibility assignment matrix (RAM)
Apply Gantt or bar charts
Apply network diagrams
Apply critical path method (CPM)
Apply project education and review techniques
Apply software programs

Competency: Implement projects

Competency Builders:

Monitor project
Control project
Modify project

Competency: Evaluate projects

Competency Builders:

Analyze performance
Close-out project evaluation
Draw project management conclusions

Unit: Technical Documentation

Competency: Demonstrate proficiency in technical documentation

Competency Builders:

Identify parameters
Ask questions
Interpret specifications or drawings
Record process (e.g., flowchart, step-by-step)
Record data
Maintain test logs
Compile cumulative reference/record

Competency: Demonstrate proficiency in technical report writing

Competency Builders:

Use data books and cross reference/technical manuals
Identify type of report needed
Compile relevant data
Design applicable charts and graphs
Analyze data
Draw conclusions
Outline reports
Write reports
Present reports

Unit: Basic Personal Computer Concepts

Competency: Explain use of personal computers in business

Competency Builders:

Describe the impact of computer use on individuals and businesses
Identify basic applications of computers in business
Identify automated business systems and electronic media
Identify different types and sizes of computers
Define input, processor, output, and storage units
Identify how PCs integrate with other information technologies (e.g., scanners, mainframes)
Describe impact of computer use on individuals and business
Identify basic applications of computers in business

Competency: Describe personal computer operations

Competency Builders:

Explain how data is stored in main computer memory
Explain how a computer system executes program instruction
Explain electronic storage capacity
Explain electronic units of measure and how they represent data
Identify data storage techniques
Identify types of memory
Explain different types of input and output

Competency: Explain information processing

Competency Builders:

Define operating systems
Describe the difference between data files and program files
Demonstrate knowledge of system commands
Define software types and functions
Describe basic disk operation and care
List business applications of software package
List advantages and disadvantages of integrated and dedicated software

Competency: Demonstrate computer literacy

Competency Builders:

Identify computer components
Identify parallel versus serial ports
Explain differences between conventional, expanded, and extended memory
Identify use of storage media
List commands that affect disk operation
Use disk operating system to format disks
Originate directories and subdirectories
Explain common configuration variables
Explain device driver concepts
Demonstrate commands that open, close, copy, delete, and rename files on disk
Keyboard document(s) using computer

Unit: Packaged PC Applications

Competency: Explain software applications

Competency Builders:

Describe need for application software
Describe different types of software applications
Explain advantages and disadvantages of various software applications
List software sources
Explain copyright laws for software

Competency: Explain spreadsheet packages

Competency Builders:

Define spreadsheet
Demonstrate knowledge of basic spreadsheet terminology
Define components of spreadsheets
Describe implementation of spreadsheet operations in business scope

Competency: Perform word processing functions

Competency Builders:

Define word processing terminology
Explain functions of word processing software
Explain word processing applications
Use appropriate reference materials
Keyboard efficiently by touch
Use mouse
Initialize diskette
Prepare backup file
Maintain backup file
Update spelling dictionary and spell check
Perform document functions (e.g., locate, rename, delete, save, retrieve, copy)
Perform formatting functions (e.g., set margins and tabs, center, underline, bold, cut and paste)
Use edit features
Use sort features
Add page numbers to document
Add headers and footers
Print files, pages, screens and blocks of text
Verify accuracy of output
Create a document
Save a document to disk
Retrieve a document from disk
Edit an existing document
Describe word-wrap
Print a document
Create glossary file
Store boilerplate material
Compose documents at keyboard
Tabulate multiple columns
Prepare new documents from existing ones
Merge selected copy with new information
Prepare various types of table options
Index text
Format text
Integrate database, spreadsheet and graphic files
Convert documents from one system to another
Demonstrate use of computer thesaurus
Use multimedia techniques/resources

Competency: Use spreadsheet packages

Competency Builders:

Use spell check
Execute an electronic spreadsheet
Enter data, formulas, and functions
Differentiate between labels and numbers
Compare absolute and relative addressing
Speculate using "what if..." questions
Sequence keystrokes in the creation of a macro
Create database within spreadsheet and perform data query functions
Move around in spreadsheet and correct errors
Format spreadsheet
Create graphs
Print graphs
Save previously saved files
Load previously saved files
Replicate cells using copy commands
Use electronic spreadsheet to complete business application
Use spreadsheet to plan financial strategies
Prepare spreadsheet
Use multimedia techniques/resources

Competency: Explain database packages

Competency Builders:

Define database
Explain terms used in database systems
Describe common functions of database systems

Competency: Use database packages

Competency Builders:

Use database package to create, input, edit, and display fields and records
Analyze structure of database files
Perform calculations with a database file
Alter structure of database file
Sort records based on multiple fields
Identify advanced database technology
Use appropriate reference materials
Create relational database
Enter elements into database
Proofread database
Edit database
Design report formats
Apply database management system (DBMS) commands
Print reports using data from multiple databases
Use database files with other application software
Verify accuracy of output (e.g., edit reports)
Use multimedia techniques/resources

Competency: Explain function of shared environments

Competency Builders:

List purposes of a network environment
Define electronic mail
Identify advantages and disadvantages of electronic mail
Describe impact of local and wide area networks on mail delivery

Competency: Use a shared environment

Competency Builders:

Compose electronic messages
Send electronic messages using appropriate format
List categories of electronic mail service
Transmit document using electronic mail system
Monitor electronic mail

Competency: Manage software packages

Competency Builders:

Install software packages
Upgrade software packages
Document installation of software packages
Convert data files

Competency: Perform computer business graphics

Competency Builders:

Define purpose and types of graphics
Use appropriate reference materials
Create graphics
Proofread graphics
Edit graphics
Save graphics
Retrieve graphics
Print graphics to various output devices
Verify accuracy of output
Use graphic functions to create files, input data, process data, and produce output
Use graphics files with other application software

Competency: Use graphic user interface (GUI) techniques

Competency Builders:

Explain multi tasking environment
Setup data exchange between two different applications
Setup an object link between two different applications
Explain the use of dynamic link libraries

Unit: General Office Functions

Competency: Maintain a safe working environment

Competency Builders:

Comply with company safety and health rules and regulations
Use appropriate reference materials
Use equipment correctly
Use appropriate actions during emergencies
Maintain a clean and orderly work area

Competency: Maintain work flow

Competency Builders:

Organize work
Prioritize work
Apply time-management techniques
Complete assigned tasks in a timely manner
Coordinate with team members as needed

Competency: Demonstrate positive relations with customers/clients

Competency Builders:

Identify importance of repeat customers to business
Identify customer needs and wants
Provide prompt and courteous service
Resolve customer inquiries and complaints and/or refer customer to appropriate person

Competency: Perform telephone operations

Competency Builders:

Use appropriate reference materials
Display telephone etiquette
Operate equipment
Route calls
Listen assertively
Verify information
Screen calls
Record messages
Relay messages timely
Place calls
Log long-distance calls
Create telephone directories
Maintain telephone directories
Organize teleconferences
Use voice mail/messaging systems

Competency: Use facsimile machine

Competency Builders:

Explain how a facsimile machine operates
Record information regarding material being sent
Operate facsimile
Verify to sender that process has been completed
File copy of facsimile order
Maintain supplies for facsimile use
Log maintenance needs regarding facsimile

Competency: Assist visitors

Competency Builders:

Greet visitors
Screen visitors
Maintain visitor log
Make appropriate introductions
Portray professional image

Competency: Perform scheduling functions

Competency Builders:

Create calendar/schedule
Maintain appointment calendars
Process requests for appointments
Verify appointments

Competency: Use job-related reference materials

Competency Builders:

Identify reference materials
Assemble reference materials
Abstract information from reference materials
Compile data

Competency: Coordinate meeting arrangements

Competency Builders:

Make arrangements with meeting planners
Distribute agenda
Assemble relevant information
Notify participants
Confirm arrangements

Competency: Generate minutes

Competency Builders:

Record appropriate notes
Gather materials
Prepare minutes
Distribute minutes
File minutes

Competency: Coordinate travel plans

Competency Builders:

Check travel resources
Inquire about traveler's preferences
Arrange necessary transportation and lodging
Obtain passports and/or visas
Confirm arrangements
Prepare itineraries
Distribute itineraries
Alter arrangements

Competency: Perform mail functions

Competency Builders:

Identify various mail and delivery services
Process incoming mail
Distribute mail
Operate equipment
Process outgoing mail

Competency: Maintain office supplies

Competency Builders:

Prepare cost justification for purchasing supplies
Order supplies
Verify supply order against supplies
Store and secure supplies
Distribute supplies
Inventory supplies
Prepare inventory reports

Competency: Perform copying functions

Competency Builders:

Use appropriate reference materials
Operate equipment
Collate documents
Maintain equipment
Identify copying methods
Identify best copying method for task
Identify characteristics of paper stock
Keep appropriate records
Identify appropriate copyright applications

Competency: Maintain filing system

Competency Builders:

Give reasons for keeping records
Identify types of records needed
Develop proper techniques/procedures for maintaining records
Use appropriate reference materials
Describe procedure for initial inventory of records
Organize files
Index files
File information
Retrieve information
Consolidate files
Archive or destroy files
Secure files for legality and confidentiality
Follow retention schedule
Create new files
Update files
Prepare materials for filing
Sort documents
Apply cross-referencing and logging systems
Store documents
Locate documents

Competency: Maintain hardware and software

Competency Builders:

Use appropriate reference materials
Evaluate hardware and software
Recommend hardware and software
Schedule routine hardware maintenance
Update software
Report malfunction(s)
Maintain usage logs
Inventory hardware and software

Unit: Office Technology

Competency: Use telecommunications

Competency Builders:

Define the role of telecommunications in business
Use appropriate reference materials
Operate telephone systems
Operate fax machines

Competency: Perform basic word processing functions

Competency Builders:

Create glossary file
Store boilerplate material
Compose documents at keyboard
Tabulate multiple columns
Prepare new documents from existing ones
Merge selected copy with new information
Prepare various types of table options
Index text
Format text
Integrate database, spreadsheet, and graphics files
Convert documents from one system to another
Demonstrate use of computer thesaurus

Competency: Perform transcription functions

Competency Builders:

Identify various types of dictation/transcription equipment
Keyboard documents
Proofread documents
Edit documents
Save documents
Retrieve documents
Print documents

Competency: Use computerized filing system

Competency Builders:

Identify uses for electronic filing system
List advantages and disadvantages of electronic filing
Retrieve information from filing system
Store records electronically
Duplicate records electronically
Transmit records electronically
Maintain financial records

Competency: Perform database functions

Competency Builders:

Identify advanced database technology
Use appropriate reference materials
Create relational database
Enter elements into database
Proofread database
Edit database
Design report formats
Apply database management system (DBMS) commands
Print reports using data from multiple databases
Use database files with other application software
Verify accuracy of output

Competency: Perform desktop publishing functions

Competency Builders:

Define desktop publishing
Explain word processing functions in desktop publishing
Use appropriate reference materials
Use desktop publishing terms
Use desktop publishing software
Use graphic design and layout functions of desktop publishing
Design publications
Merge word-processing, graphics, database, and spreadsheet files
Proofread documents
Edit documents
Save documents
Retrieve documents
Print documents using various output devices

Competency: Perform computer business graphics

Competency Builders:

Define purpose and types of graphics
Use appropriate reference materials
Create graphics
Proofread graphics
Edit graphics
Save graphics
Retrieve graphics
Print graphics to various output devices
Verify accuracy of output
Use graphic functions to create files, input data, process data, and produce output
Use graphics files with other application software

Unit: General Accounting Functions

Competency: Apply arithmetical accounting skills

Competency Builders:

Compute cash discounts for various terms
Compute trade discounts
Compute extension, sales tax, and totals of sales slips
Compute markups and markdowns
Calculate rates of trade and cash discounts
Calculate unit prices given quantity prices
Calculate costs of portions of units
Solve problems involving fractions, decimals, and percentages
Solve commission problems
Solve finance-charge problems
Solve annual percentage rate problems

Competency: Apply accounting principles

Competency Builders:

Define accounting terminology
Define journals and ledgers
Identify basic accounting principles
Identify basic accounting applications
Identify computer accounting applications
Identify financial control procedures
Explain increases and decreases in accounts
Explain periodic reporting procedures
Prepare income statement
Prepare balance sheet columns
Prepare cash flow statement
Interpret balance sheets
Interpret income statements
Interpret cash-flow analysis statements

Competency: Perform manual accounting functions

Competency Builders:

Explain use of record keeping in relation to business and economic applications
Use appropriate reference materials
Analyze transactions
Use "T" accounts to label increases, decreases, and balances
Record transactions
Process receivables
Monitor expense accounts
Process payables
Prepare budgets
Process purchases
Prepare comparative (actual vs. budget) income statement

Competency: Perform automated accounting functions

Competency Builders:

Use appropriate reference materials
Operate equipment
Key data on numeric keyboard
Import or download data from computer records
Scan data from various media
Use integrated software package for simulation of accounting cycle
Set up chart of accounts for general ledger
Set up accounts payable and accounts receivable ledgers
Add accounts to general and subsidiary ledgers
Input account balances
Enter journal transactions
Process journal transaction
Prepare trial balance
Verify data and correct errors
Generate reports
Proofread accounting records and statements
Edit accounting records and statements
Save accounting records and statements
Retrieve accounting records and statements
Print accounting records and statements

Competency: Perform spreadsheet functions

Competency Builders:

Explain computer spreadsheet analysis
Use appropriate reference materials
Operate equipment
Create or format spreadsheet
Enter formulas
Move cells and ranges
Enter data on spreadsheet
Import or download data to spreadsheet
Apply data sort, data query, data fill, and data distribution
Export spreadsheet files to word processing, graphics and database files
Import spreadsheet files to word processing, graphics and database files
Proofread spreadsheet data
Edit spreadsheet data
Verify accuracy of output
Save spreadsheet
Retrieve spreadsheet
Print spreadsheet
Use spreadsheet functions to create files, input data, process data, and produce output
Use spreadsheet files with other application software

Competency: Perform payroll functions

Competency Builders:

Use appropriate reference materials
Collect payroll data
Process payroll
Comply with company policies and procedures
Comply with government and legal requirements
Maintain records and forms
Monitor personnel costs

Competency: Perform banking functions

Competency Builders:

Use appropriate reference materials
Prepare checks, deposit slips, and withdrawal slips
Maintain checkbook
Balance checkbook
Maintain petty cash
Balance petty cash
Explain automated banking transactions
Prepare banking records
Maintain banking records

Competency: Process cost accounting information

Competency Builders:

Define cost accounting, direct materials, direct labor and overhead
Define cost allocation methods
Identify source documents
Compute direct materials by job or process
Compute direct labor by job or process
Compute overhead rates to apply to jobs or processes
Compute cost of goods produced
Compute cost of goods sold
Journalize cost of goods produced and sold entries
Post cost of goods produced and sold entries
Compute cost of inventories
Prepare cost production reports
Prepare related records of job or process costs

Competency: Process end-of-fiscal-period information

Competency Builders:

Prepare worksheet
Prepare trial balance
Foot ledger accounts and compute balances
Prove equality of debits and credits
Locate errors
Record adjustments
Make appropriate extensions
Journalize basic adjusting, closing, and reversing entries
Post basic adjusting, closing, and reversing entries
Prepare basic income statement
Prepare basic balance sheet
Prepare basic cash flow statement

Unit: Application Programming and Design

Competency: Explain computer applications

Competency Builders:

Explain hardware component functions
Explain uses of a computer
Describe major events in the development of computers
Describe major types of software and their functions
Read computer publications
Interpret computer trends
Describe batch processing
Describe interactive processing
Describe ad hoc reporting

Competency: Develop computer applications

Competency Builders:

Use appropriate reference materials
Analyze specifications
Divide design specifications into logical blocks (e.g. flowchart, data flow diagram, system flows record and layout)
Identify constraints
Identify programming language
Identify input and output (I/O) requirements
Prepare logic using program-flow diagram

Competency: Explain programming theory

Competency Builders:

Explain the meaning of "reserved word"
Describe arrays and tables
Explain compilers
Differentiate between system documentation and user documentation
Describe what is meant by top-down design and structured programming
Identify the steps in the program development cycle
Design a decision table for a specified problem
Identify the steps and procedures required to develop test data
Explain the difference between recursion and iteration
Describe what is meant by data validation
Describe what is meant by "object oriented" programming

Competency: Apply programming theory

Competency Builders:

Demonstrate use of working storage variables
Write source code per standards
Use spacing charts to plan program output
Code a modular program
Interpret a simple hierarchy chart
Interpret a simple pseudocode design
Create a flow-chart
Perform program sorts
Demonstrate use of loops
Demonstrate use of logical operators (e.g., AND, OR, NOT)
Code error-handling techniques
Demonstrate use of data files

Competency: Explain programming languages

Competency Builders:

Outline history of programming languages
Identify primary use of programming languages and their weaknesses
List rules for naming variables

Competency: Use programming language

Competency Builders:

Perform character manipulation
Declare variables
Initialize variables
Modify variables
Demonstrate a function
Demonstrate a library
Demonstrate a subroutine
Demonstrate system calls
Apply conditional statements
Evaluate series of logical expressions
Code separate addition, subtraction, multiplication, and division statements
Declare a one-dimensional array
Initialize an array
Generate executable code

Competency: Use operating system

Competency Builders:

Apply appropriate text editor
Apply operating system commands
Apply operating system utilities

Competency: Test programs

Competency Builders:

Explain debugging statements
Perform debugging functions
Debug compilation errors
Create test data that checks logic and error routines
Execute program with test data
Correct execution errors
Perform unit and integration test
Analyze test results
Define auto testing software

Competency: Apply programming skills

Competency Builders:

Demonstrate knowledge of file and table processing
Develop program using data validation techniques
Develop interactive process
Develop menu-driven program
Develop database program
Develop program that utilizes a recursive process
Develop program using copy libraries
Develop program using system calls
Develop program using design tool

Competency: Develop documentation

Competency Builders:

Prepare program documentation
Prepare user documentation
Prepare data-flow diagrams
Update design documentation

Competency: Demonstrate knowledge of the systems design process

Competency Builders:

Identify processing requirements
Identify programming language
Use appropriate reference materials
Describe role of user and management in the development of a computer system
Describe use of data flow diagrams, system flowcharts and display screen layout forms
Conduct interviews
Design system inputs and outputs and processes
Create design documentation
Present system design

Competency: Evaluate system

Competency Builders:

Identify evaluation criteria
Develop test plan
Analyze test data
Present results
Recommend corrective action, if appropriate
Explain iterative nature of system evaluation

Competency: Implement system

Competency Builders:

Identify implementation plan
Identify conversion method
Train personnel
Present implementation plan

Unit: Supervision

Competency: Manage human resources

Competency Builders:

Apply appropriate management and leadership styles
Use foresight to anticipate and manage change
Display managerial and supervisory skills
Apply human relations skills
Develop management objectives
Create and/or implement organizational charts
Clarify company policies and procedures
Maintain office procedures manual(s)
Establish office procedures
Prepare and/or monitor budgets
Prepare managerial reports
Analyze production reports
Maintain appropriate work environment
Conduct tours
Monitor progress
Prepare and communicate productivity reports
Provide and/or coordinate training for new policies
Troubleshoot office problems
Communicate performance expectations
Counsel employees about career objectives
Maintain performance records
Adhere to company policies regarding discrimination and harassment
Address employees regarding disciplinary action(s)
Recommend employees for promotion
Explain procedure for handling grievances
Evaluate employee performance
Document personnel issues

Competency: Manage projects

Competency Builders:

Conduct needs analysis
Set priorities
Research information
Develop goals and objectives
Develop strategic plan
Develop project budget
Apply forecasting techniques
Apply prioritizing techniques
Schedule work assignments
Collect data
Analyze data
Act on data
Monitor project progress
Meet project timelines
Monitor budget
Apply quality measures and counter measures

Competency: Manage work flow

Competency Builders:

Plan office layout for workflow
Create organizational charts
Communicate operating policies and procedures
Maintain office procedures manual(s)
Identify production standards
Interface with other departments
Prioritize work
Assign work
Delegate work
Provide instruction
Monitor progress
Complete productivity and/or managerial reports
Complete assigned tasks in a timely manner
Coordinate with team members

Competency: Conduct staff/team meetings

Competency Builders:

Plan meeting
Set agenda
Set and schedule meeting
Schedule meeting room
Invite appropriate personnel
Identify need for outside speakers
Assign someone to take minutes
Make introductions
Invite questions and comments, and group participation
Focus on agenda items, but maintain issues list as they arise
Decide appropriate action, time frame, and accountability to tasks
Monitor time
Close meeting on time
Publish minutes in timely manner to appropriate persons

Competency: Conduct training

Competency Builders:

Secure training resources, materials, and equipment
Assess training needs
Train employees
Evaluate progress
Provide appropriate feedback
Document training participation

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Printed Name: Chester Hansen	Organization: Center on Education & Training for Employment
Address: CETE The Ohio State University 1900 Kenny Rd, Col., OH 43210	Telephone Number: (614) 292-4353 800-848-4015 Date: 11/25/95

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